ELECTRICAL BOARD PACKET
FEBRUARY 21, 2008

Division of Building Safety

Electrical Board

Fiscal Year 2008. For the month ending December 31, 2007

	Budget	Expenditures	Remaining	% Used
PERSONNEL COSTS	3,442,500.00	1,609,946.59	1,832,553.41	46.8
OPERATING EXPENSES	1,785,829.00	424,290.44	1,361,538.56	23.8
CAPITAL OUTLAY	-	4,762.00	(4,762.00)	
Total	**5,228,329.00**	**2,038,999.03**	**3,189,329.97**	**39.0**

Cash Report

Beginning	Receipts	Transfers	Expenditures	Balance
2,298,589.76	2,106,141.77	(168,285.90)	2,113,956.36	2,122,489.27

Division of Building Safety

Revenue / Expenditures

Fiscal Year 2008, As of Month Ending Dec

Electrical- 0229-01

OBJECT	TITLE	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
		2,298,589.76	2,428,338.68	2,290,869.43	2,260,575.00	2,237,600.58	2,158,784.16	-	-	-	-	-	-	2,298,589.76
BEG CASH BALANCE		**2,298,589.76**	**2,428,338.68**	**2,290,869.43**	**2,260,575.00**	**2,237,600.58**	**2,158,784.16**	**-**	**-**	**-**	**-**	**-**	**-**	**2,298,589.76**
1001	CASH ON HAND	-	(200.00)	-	-	-	-	-	-	-	-	-	-	(200.00)
1502	DUE FROM OTHER FUNDS OR APPROPRIATIONS	-	355.36	(55.00)	55.00	-	-	-	-	-	-	-	-	355.36
2105	P CARD LIABILITY	11,653.83	(2,610.46)	(545.67)	(563.53)	577.67	6,077.80	-	-	-	-	-	-	14,589.64
2402	SUSPENSE CLEARING ACCOUNT	6,418.71	(3,695.61)	1,123.65	914.60	(783.00)	760.32	-	-	-	-	-	-	4,738.67
4800	OPERATING TRANSFERS OUT	-	(168,285.90)	-	-	-	-	-	-	-	-	-	-	(168,285.90)
TOTAL BALANCE SHEET		**18,072.54**	**(174,436.61)**	**522.98**	**406.07**	**(205.33)**	**6,838.12**	**-**	**-**	**-**	**-**	**-**	**-**	**(148,802.23)**
1020	REGULATORY LICENSE	102,685.82	41,235.00	17,075.20	17,535.00	12,680.00	12,385.00	-	-	-	-	-	-	203,596.02
1090	INSPECTION FEES	341,786.95	350,032.51	284,997.31	319,223.49	300,771.10	244,128.41	-	-	-	-	-	-	1,840,939.77
1155	FILING FEES	1,350.00	1,720.00	945.00	1,265.00	1,390.00	1,335.00	-	-	-	-	-	-	8,005.00
1315	FINES	3,200.00	4,821.34	1,802.50	5,205.00	13,010.00	1,948.25	-	-	-	-	-	-	29,987.09
1545	TECHNICAL SERVICES	80.00	1,880.00	1,007.00	260.00	2,760.00	200.00	-	-	-	-	-	-	6,187.00
1936	AUTOMOBILES	-	-	-	11,655.00	-	-	-	-	-	-	-	-	11,655.00
2715	RENT	-	-	-	16,263.06	(10,570.98)	-	-	-	-	-	-	-	5,692.08
3624	CASH DRWR OVER/SHORT	-	-	(5.00)	-	(5.00)	-	-	-	-	-	-	-	(10.00)
3635	REFUND/REIMB PY EXP	12.85	56.96	-	-	-	-	-	-	-	-	-	-	69.81
3690	OTHER	-	20.00	-	-	-	-	-	-	-	-	-	-	20.00
TOTAL REVENUE		**449,115.62**	**399,765.81**	**305,822.01**	**371,406.55**	**320,035.12**	**259,996.66**	**-**	**-**	**-**	**-**	**-**	**-**	**2,106,141.77**
4101	GROSS SALARY & WAGE	196,385.38	184,785.68	185,990.31	178,203.12	264,358.90	171,903.33	-	-	-	-	-	-	1,181,626.72
4201	EMPLOYEE BENEFITS	74,345.20	68,313.80	69,403.58	67,277.90	83,383.29	65,596.10	-	-	-	-	-	-	428,319.87
TOTAL PERSONNEL COSTS		**270,730.58**	**253,099.48**	**255,393.89**	**245,481.02**	**347,742.19**	**237,499.43**	**-**	**-**	**-**	**-**	**-**	**-**	**1,609,946.59**
6000	CAPITAL OUTLAY	2,441.00	-	-	92,000.00	-	-	-	-	-	-	-	-	94,441.00
TOTAL PY ENCUMBRANCE		**2,441.00**	**-**	**-**	**92,000.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**94,441.00**
5001	COMMUNICATION COSTS	7,360.32	18,394.95	6,753.36	12,582.32	12,461.28	10,402.55	-	-	-	-	-	-	67,954.78
5051	EMPLOYEE DEVELOPMENT COSTS	5,072.50	1,837.04	1,338.75	1,652.25	2,467.46	(1,474.06)	-	-	-	-	-	-	10,893.94

Division of Building Safety

Revenue / Expenditures

Fiscal Year 2008, As of Month Ending Dec

OBJECT	TITLE	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
5101	GENERAL SERVICES	2,303.22	12,982.53	5,836.64	3,747.56	5,792.17	6,180.12	-	-	-	-	-	-	36,842.24
5151	PROFESSIONAL SERVICES	11,357.03	4,938.25	345.55	1,460.31	(256.91)	2,766.76	-	-	-	-	-	-	20,610.99
5201	REPAIR & MAINT SVCS	8,352.72	4,973.57	3,838.05	4,060.30	5,234.53	8,059.80	-	-	-	-	-	-	34,518.97
5251	ADMINSTRATIVE SERVICES	263.40	7.95	0.45	0.91	-	1,225.90	-	-	-	-	-	-	1,498.61
5301	COMPUTER SERVICES	-	882.79	337.59	0.93	111.28	368.58	-	-	-	-	-	-	1,701.17
5351	EMPLOYEE TRAVEL COSTS	2,959.08	7,217.47	680.19	2,400.33	1,513.38	2,366.88	-	-	-	-	-	-	17,137.33
5401	ADMINISTRATIVE SUPPLIES	5,750.03	2,536.64	2,973.10	5,167.13	8,578.00	1,444.46	-	-	-	-	-	-	26,449.36
5451	FUEL & LUBRICANTS COSTS	11,312.72	10,704.97	11,062.05	9,509.15	9,818.46	10,083.05	-	-	-	-	-	-	62,490.40
5551	COMPUTER SUPPLIES	1,705.54	2,930.73	47,473.55	1,388.46	3,436.76	10,404.33	-	-	-	-	-	-	67,339.37
5601	REPAIR & MAINT SUPPLIES	2,563.19	(483.56)	(841.72)	728.53	(234.08)	(247.29)	-	-	-	-	-	-	1,485.07
5701	SPECIFIC USE SUPPLIES	27.93	370.36	876.69	1,057.61	1,520.57	5,717.75	-	-	-	-	-	-	9,570.91
5751	INSURANCE	-	-	-	8,103.89	-	-	-	-	-	-	-	-	8,103.89
5851	UTILITY CHARGES	-	19.67	-	35.95	35.95	(19.67)	-	-	-	-	-	-	71.90
5901	RENTALS & OPER LEASES	5,189.98	1,340.07	45.13	5,360.39	250.45	7,158.22	-	-	-	-	-	-	19,344.24
5961	MISC EXPENDITURES	50.00	36,045.54	526.15	50.00	412.72	1,192.86	-	-	-	-	-	-	38,277.27
TOTAL OPERATING COSTS		**64,267.66**	**104,698.97**	**81,245.53**	**57,306.02**	**51,142.02**	**65,630.24**	**-**	**-**	**-**	**-**	**-**	**-**	**424,290.44**
6401	COMPUTER EQUIPMENT	-	5,000.00	-	-	(238.00)	-	-	-	-	-	-	-	4,762.00
TOTAL CAPITAL OUTLAY		**-**	**5,000.00**	**-**	**-**	**(238.00)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4,762.00**
		337,439.24	362,798.45	336,639.42	394,787.04	398,646.21	303,129.67	-	-	-	-	-	-	2,133,440.03
TOTAL EXPENDITURES		**337,439.24**	**362,798.45**	**336,639.42**	**394,787.04**	**398,646.21**	**303,129.67**	**-**	**-**	**-**	**-**	**-**	**-**	**2,133,440.03**
		2,428,338.68	2,290,869.43	2,260,575.00	2,237,600.58	2,158,784.16	2,122,489.27	-	-	-	-	-	-	2,122,489.27
END CASH BALANCE		**2,428,338.68**	**2,290,869.43**	**2,260,575.00**	**2,237,600.58**	**2,158,784.16**	**2,122,489.27**	**-**	**-**	**-**	**-**	**-**	**-**	**2,122,489.27**

1/15/2008

ELECTRICAL JOURNEYMAN FIRST EXAM ATTEMPTS

2007

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TTL	%
JATC	T	4	4	7	0	0	2	0	0	1	0	0	0	18	89%
	P	4	2	7	0	0	2	0	0	1	0	0	0	16	
BSU	T	0	0	4	12	6	8	6	8	1	5	2	3	55	51%
	P	0	0	2	11	3	1	2	4	0	2	1	2	28	
BSU/ CORR	T	0	0	0	0	0	0	0	0	1	2	1	0	4	50%
	P	0	0	0	0	0	0	0	0	0	1	1	0	2	
ISU	T	0	0	0	3	0	4	3	0	0	1	1	1	13	38%
	P	0	0	0	2	0	2	0	0	0	0	1	0	5	
NIC	T	1	1	1	2	1	5	1	5	0	1	1	2	21	67%
	P	0	1	0	2	1	5	1	4	0	0	0	0	14	
CSI	T	0	3	2	6	7	0	2	2	4	2	0	1	29	59%
	P	0	1	0	4	5	0	1	2	2	1	0	1	17	
EITC	T	2	0	1	3	1	6	4	1	3	0	0	0	21	67%
	P	0	0	1	1	1	6	3	1	1	0	0	0	14	
LCSC	T	0	0	0	2	2	1	0	6	1	0	0	0	12	33%
	P	0	0	0	1	1	0	0	2	0	0	0	0	4	
TVCC	T	0	0	0	0	0	1	0	0	0	0	1	0	2	0%
	P	0	0	0	0	0	0	0	0	0	0	0	0	0	
PRE'86 OOS	T	3	10	12	8	8	5	9	11	6	8	5	5	90	28%
	P	0	2	0	1	3	1	2	6	5	2	1	2	25	
NNU	T	0	0	0	1	1	2	3	0	1	0	0	0	8	50%
	P	0	0	0	1	0	1	2	0	0	0	0	0	4	
TOTAL	T	10	18	27	37	26	34	28	33	18	19	11	12	273	47%
	P	4	6	10	23	14	18	11	19	8	6	4	5	129	
%		40%	33%	37%	62%	54%	53%	39%	58%	44%	32%	36%	42%	47%	

YEARLY JOURNEYMAN FIRST EXAM ATTEMPTS

1/15/2008		2001	2002	2003	2004	2005	2006	2007	TTL	%
JATC	**T**	**33**	20	32	40	38	45	18	175	63%
	P	**14**	11	18	28	23	30	16	110	
IBEW	**T**	**4**	3	12	5	6			26	35%
	P	**0**	3	3	2	1			9	
BSU	**T**	**44**	54	47	59	50	55	55	265	43%
	P	**21**	21	22	20	24	28	28	115	
BSU/	**T**	**4**	3	2	8	1		4	14	50%
CORR	**P**	**1**	1	0	5	1		2	7	
ISU	**T**	**9**	18	8	15	23	12	13	76	54%
	P	**3**	15	6	8	8	4	5	41	
NIC	**T**	**13**	31	27	32	23	23	21	136	59%
	P	**5**	22	15	18	16	9	14	80	
CSI	**T**	**11**	20	17	23	22	21	29	103	52%
	P	**5**	15	11	14	8	6	17	54	
EITC	**T**	**9**	13	26	21	17	22	21	99	51%
	P	**5**	9	15	8	5	13	14	50	
LCSC	**T**	**3**	9	8	8	3	18	12	46	54%
	P	**1**	7	3	4	0	11	4	25	
TVCC	**T**	**6**	5	3	3	6		2	17	47%
	P	**1**	0	2	4	2		0	8	
PRE'86	**T**	**42**	51	33	32	32	113	90	261	38%
OOS	**P**	**22**	24	22	10	8	34	25	98	
NNU	**T**	**0**	0	1	5	5	4	8	15	60%
	P	**0**	0	0	2	4	3	4	9	
TOTAL	**T**	178	227	216	251	226	313	273	1233	49%
	P	78	128	117	123	100	138	129	606	
%		44%	56%	54%	49%	44%	44%	47%	49%	

01/15/08

I.C.C.
ELECTRICAL EXAM SUMMARY

T= TOTAL TESTED
P = TOTAL PASSED
% = PERCENT PASSED

MONTH	CONTRACTOR			JOURNEYMAN			MASTER			LIMITED ENERGY			REFRIG HTG,A/C			SIGN			MFG			DRILLER/ PUMP			IRRIG			ELEV			TOT TSTD	TOT PASS	% PASS
	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%			
JAN 06	7	4	57%	13	6	46%	4	2	50%	3	3	100%																			27	15	56%
FEB 06	10	10	100%	34	16	47%	4	1	25%	1	0	0%	2	0	0%										2	2	100%				53	29	55%
MAR 06	4	4	100%	23	10	43%	4	1	25%	1	1	100%	1	0	0%	1	1	100%				1	1	100%							35	18	51%
APR 06	8	8	100%	38	18	47%	6	3	50%	4	3	75%	2	0	0%	1	1	100%				3	2	67%							62	35	56%
MAY 06	14	11	79%	55	29	53%	8	3	38%	1	0	0%	1	0	0%	1	0	0%							1	1	100%	1	1	100%	82	45	55%
JUN 06	16	14	88%	54	28	52%	7	4	57%	2	0	0%	1	0	0%				2	0	0%	2	2	100%				1	0	0%	85	48	56%
JUL 06	15	14	93%	83	36	43%	5	2	40%	4	2	50%	2	0	0%													1	1	100%	110	55	50%
AUG 06	8	7	88%	42	18	43%	4	2	50%	1	0	0%	1	0	0%							1	1	100%				2	1	50%	59	29	49%
SEPT 06	11	11	100%	35	15	43%	11	5	45%	1	1	100%										1	0	0%	1	1	100%				60	33	55%
OCT 06	11	7	64%	54	22	41%	9	3	33%	1	0	0%										1	1	100%	2	2	100%	2	1	50%	80	36	45%
NOV 06	16	14	88%	42	27	64%	9	4	44%	1	0	0%	2	1	50%													1	1	100%	71	47	66%
DEC 06	10	9	90%	26	13	50%	10	5	50%																						46	27	59%
JAN 07	9	8	89%	28	10	36%	3	1	33%	2	0	0%	1	1	100%	1	1	100%	1	0	0%	2	0	0%	1	1	100%	3	1	33%	51	23	45%
FEB 07	11	11	100%	34	12	35%	8	2	25%	7	4	57%	1	0	0%													4	1	25%	65	30	46%
MAR 07	15	14	93%	44	23	52%	8	4	50%	11	6	55%	2	0	0%	1	0	0%	1	0	0%	2	1	50%				1	1	100%	85	49	58%
APR 07	15	12	80%	64	29	45%	6	2	33%	9	4	44%	4	2	50%	1	1	100%										6	5	83%	105	55	52%
MAY 07	19	19	100%	50	22	44%	13	7	54%	4	1	25%	4	3	75%	1	1	100%	1	0	0%	1	1	100%	1	1	100%	8	6	75%	102	61	60%
JUN 07	7	6	86%	63	31	49%	6	3	50%	4	2	50%	4	2	50%	1	0	0%				1	0	0%				6	4	67%	92	48	52%
JUL 07	10	8	80%	44	17	39%				2	2	100%	2	2	100%													3	2	67%	61	31	51%
AUG 07	20	18	90%	54	27	50%	1	1	100%	2	0	0%				1	1	100%				3	0	0%				3	3	100%	84	50	60%
SEPT 07	13	11	85%	35	16	46%	1	1	100%	6	2	33%	5	4	80%							3	0	0%				1	1	100%	64	35	55%
OCT 07	15	14	93%	35	13	37%				3	2	67%	1	0	0%	1	1	100%													55	30	55%
NOV 07	13	11	85%	34	12	35%	3	3	100%													2	1	50%				3	3	100%	55	30	55%
DEC 07	10	8	80%	25	11	44%	6	3	50%	3	2	67%	2	0	0%													1	0		47	24	51%
	287	253	88%	1009	478	47%	136	62	46%	73	35	48%	38	15	39%	10	7	70%	5	0	0%	23	10	43%	8	8	100%	47	32	68%	1552	850	55%

01/15/08

LIC SUM YR

ELECTRICAL EXAM SUMMARY

T = TOTAL TESTED

P = TOTAL PASSED

% = PERCENT PASSED

MONTH	CONTR			JYMN			MASTER			LIMITED ENERGY			REFRIG HTG &A/C			SIGN			MFG			DRILLER/PUMP			IRRIG			ELEV			TOT TSTD	TOT PASS	% PASS
	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%			
1990				261	132	51%	12	5	42%	25	15	60%	20	8	40%	19	11	58%	2	0	0%	7	5	71%	1	0	0%	4	3	75%	351	179	51%
1991				203	103	51%	7	5	71%	55	28	51%	17	5	29%	11	6	55%	2	2	100%	8	4	50%	1	1	100%				304	154	51%
1992				368	168	46%	10	7	70%	71	38	54%	39	27	69%	13	12	92%	2	1	50%	19	11	58%	15	5	33%	2	2	100%	539	271	50%
1993				392	184	47%	5	2	40%	45	31	69%	37	17	46%	8	8	100%	6	4	67%	16	9	56%	7	4	57%	6	4	67%	522	263	50%
1994	7	7	100%	396	203	51%	6	3	50%	64	46	72%	28	16	57%	6	5	83%				18	7	39%	15	7	47%	6	4	67%	546	298	55%
1995	98	94	96%	714	338	47%	10	6	60%	85	59	69%	116	85	73%	8	6	75%	4	3	75%	16	9	56%	9	2	22%	4	4	100%	1064	606	57%
1996	102	93	91%	546	293	54%	7	5	71%	27	14	52%	38	20	53%	15	11	73%	2	1	50%	24	16	67%	6	3	50%	2	2	100%	769	458	60%
1997	117	108	92%	368	189	51%	4	2	50%	58	38	66%	47	26	55%	11	4	36%	8	5	63%	16	7	44%	6	4	67%				635	383	60%
1998	149	136	91%	409	219	54%	7	3	43%	47	24	51%	60	37	62%	18	6	33%	2	1	50%	18	6	33%	12	2	17%	13	8	62%	735	442	60%
1999	133	122	92%	427	244	57%	17	8	47%	55	35	64%	41	23	56%	10	7	70%	6	2	33%	11	7	64%	5	3	60%				705	451	64%
2000	123	116	94%	430	257	60%	3	2	67%	52	28	54%	56	35	63%	32	12	38%	9	4	44%	28	12	43%	10	2	20%	7	5	71%	750	473	63%
2001	160	140	88%	377	251	67%	13	9	69%	44	24	55%	105	54	51%	17	9	53%	4	2	50%	21	7	33%	16	8	50%	10	3	30%	767	507	66%
2002	192	178	93%	336	210	63%	10	6	60%	51	28	55%	79	49	62%	8	5	63%	2	2	100%	14	6	43%	3	2	67%	8	7	88%	703	493	70%
2003	212	185	87%	301	175	58%	8	5	63%	23	7	30%	46	21	46%	6	2	33%	16	9	56%	11	3	27%	2	0	0%	1	0	0%	626	407	65%
2004	281	263	94%	420	214	51%	10	5	50%	34	13	38%	62	13	21%	6	1	17%	19	13	68%	28	8	29%	5	0	0%	10	3	30%	875	533	61%
2005	243	232	95%	446	223	50%	33	26	79%	22	9	41%	26	6	23%	13	5	38%	13	12	92%	11	2	18%	3	0	0%	5	1	20%	815	516	63%
2006	130	113	87%	499	238	48%	81	35	43%	20	10	50%	12	1	8%	3	2	67%	2	0	0%	9	7	78%	6	6	100%	8	5	63%	770	417	54%
2007	157	140	89%	510	223	44%	55	27	49%	53	25	47%	26	14	54%	7	5	71%	3	0	0%	15	3	20%	2	2	100%	39	27	69%	866	466	54%
TOTAL	2104	1927	92%	7403	3864	52%	298	161	54%	831	472	57%	855	457	53%	211	117	55%	102	61	60%	290	129	44%	124	51	41%	125	78	62%	12342	7317	59%

Legend to the Notice of Violations for Electrical

Code	Description
ELE.01	Unlicensed Electrical Contractor
ELE.02	Knowingly Employing Unlicensed Person. Any person who knowingly employs a person who does not hold a valid Idaho state electrical license or registration as required by Section 54-1010, Idaho Code and IDAPA 07.01.03, "Rules of Electrical Licensing and Registration" to perform electrical installations, shall be subject to a civil penalty of not more than two hundred ($200) for the first offense and a civil penalty of not more than one thousand dollars ($1,000) for each offense thereafter
ELE.03	Unlicensed Journeyman, Apprentice, Specialty, Trainee
ELE.04	Exceeds Journeyman To Apprentice Ratio
ELE.05	Failure to Supervise Apprentices
ELE.06	Performance Outside Scope of Specialty License
ELE.07	Failure to Permit
ELE.07a	Failure to Post
ELE.08	Failure To Make Corrections
ELE.09	Other

Washington State Department of Labor and Industries

ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

Ron Fuller, Chief Electrical Inspector **Vol. 10 No. 8** **August 2007**

Schedule For Stakeholder Meetings

We have scheduled the stakeholder meetings for the fall and winter. Stakeholder meetings are important for both the department and the industry. Meetings are from 6 PM - 9 PM. This year we plan to spend equal time on local office issues, electrical program information, listening to your comments and answering your questions. Please take the time to attend the next meeting closest to you. (Additional meetings from Dec 2007 – May 2008 in Tukwila, Bremerton, Port Angeles, Vancouver, Moses Lake, Longview, Walla Walla, Bellingham, and Yakima will be announced when locations are reserved.)

Safety Tip of the Month!

Be sure to secure your extension ladder to the building and allow at least 3' to extend above the last point of contact.

Early Meeting Locations

Sep 24	**East Wenatchee** Douglas Co. PUD No.1, 1151 Valley Mall Parkway	**Oct 17**	**Tumwater** L&I Bldg. Auditorium, 7273 Linderson Way SW
Sep 25	**Spokane** Spokane CC, Lair Building, Sasquatch Room	**Oct 18**	**Aberdeen** L&I Bldg., 415 W. Wishkah, Suite 1B
Sep 26	**Pullman** City of Pullman offices, 325 SE Paradise St.	**Oct 24**	**Everett** Snohomish County PUD, 2320 California Street
Oct 10	**Kennewick** Benton PUD, 2721 West 10th	**Nov 14**	**Tacoma** The Orcas Room, 5th floor, 950 Broadway Bldg.

2008 NEC "Code Update" Continuing Education Courses

Due to the later (December 2008) target date for the 2008 NEC adoption, the department **will not** accept any applications for 2008 NEC Code Update continuing education courses before July 2008, maybe later. The actual date will be announced in a future newsletter. If your organization has already scheduled 2008 NEC training from a national continuing education provider, then the course may be submitted for approval in the "Industry Related" category. There is no advantage to getting Code training far in advance of it's applicability on the job site. Industry stakeholders may propose significant modifications during the rule development process.

Coming WAC Rule Revisions – Proposed Adoption Of The 2008 NEC

We want our stakeholders to have the opportunity to review the 2008 NEC for potential problems prior to opening the rule revision process. The National Fire Protection Association (NFPA) typically publishes and begins distribution of a new Code edition (2008) in mid-September of the previous year (2007).

In November 2007 we will publish a Special Edition of this newsletter detailing all aspects of the revision process, including selection of the rules Technical Advisory Committee (TAC). The approximate timelines for rule revisions and proposed 2008 NEC adoption are as follows.

October 2007—File CR 101 – pre-proposal statement of inquiry
January 1, 2008—Revision submittal form will be posted on the Electrical Web site
January 1 – March 31, 2008—Receive revision proposals from the industry (91 days only – no early or late proposals will be accepted)
March 1 – 31, 2008—Accept applications for TAC membership
Sometime Between April 1 – June 30, 2008—Convene general TAC meeting(s) (as necessary)
July 2008—Review of rule proposals by the Electrical Board
August 2008—File CR 102 – rule filing (opens the public comment period)
September 2008—Public hearings
October 2008—File CR 103 – Rulemaking order (adoption)
December 2008—Rules effective – possible adoption of 2008 NEC

All official announcements in this process are posted first on the Electrical Listserv. Listserv members also receive automatic e-mailings of this newsletter on the first day of publication. Join the Listserv at:
http://www.lni.wa.gov/Main/Listservs/Electrical.asp

● WAC Rule Revisions In Progress – Temporary Fee Reductions

The electrical fees you pay comprise the dedicated electrical fund. This fund completely supports the electrical licensing, certification, and inspection programs. The existing 5% temporary fee reduction has been extended another year until December 31, 2008. These rule revisions keep the temporary reductions in WAC 296-46B-905 and -910 in place. This extension will become effective approximately November 1, 2007.

The electrical program is only allowed to spend a fixed amount allocated from this dedicated fund by the legislature to support all of our operations. Unlike a typical business, fee revenue in excess of the legislature's allocation cannot be used to improve services or create additional positions. It is appropriate that we try to maintain a "revenue neutral" fee structure to keep your costs down. We will honor this commitment to our customers and continue to advocate any fee reductions the electrical fund balance allows.

● Information About The Use Of Class B Inspection Labels (Including Schools)

In issues raised during our May electrical inspector training sessions, we were asked to address the use of Class B inspection labels for Class B eligible work done in schools (educational occupancies). Class B cannot be used on jobs where plan review is required. The previous versions of WAC 296-46B required plan review of all work in schools, either at the local office or formal review in Tumwater, depending on the scale of the project.

In the current rules (December 2006 printing) WAC 296-46B-901(15) language was restructured to clarify the threshold for small modifications to existing installations that **do not** require plan review. Some examples of these are:

- Net load reduction lighting efficiency retrofits.
- Low voltage systems.
- Branch circuit modifications involving load increases of < 5% on distribution equipment rated ≤ 400 amps and 250 volts (excluding all NEC 700 emergency system equipment).

If the work does not require plan review **and** is within the limitations of Class B work in WAC 296-46B-900(26), then Class B inspection labels may be used. Typical situations:

- A single-outlet extension, from an existing 20 amp, 120 volt circuit, is done in each of many classrooms. A Class B label is required for each classroom.
- For other than fire alarm systems, a single Class B label could be used for a limited energy system installation in an entire school.

For all eligible Class B work, if the contractor cannot complete the work in the 15 working days given to return their portion of the label to us, they should be prepared to pay a trip fee(s) for any additional random inspections done after the initial 15 days.

● New Web Page: "What You Should Know About Appliance Installation And Repair"

At the request of legitimate Appliance Repair (07D) specialty electrical contractors, we have created a page on our web site with the title (above) in this article heading. Initial installation of a household appliance is always the responsibility of the electrical contractor providing the new circuit (i.e. the circuit designer) for the appliance. Initial installation of hard-wired electrical appliances is not in the scope of the Appliance Repair (07D) specialty. Typically, appliance **replacement** and **repair** is under the control of the homeowner. We decided the most appropriate and effective place to locate the link to access the new page is on the existing "Homeowner Basics" page at:

http://www.lni.wa.gov/TradesLicensing/Electrical/BasicElectInstall/default.asp

● Electrical Question of the Month

This Month's Question: The total calculated service load for a 12-unit multifamily dwelling building is 137,500 VA. The contractor will feed each unit with a 120/208 volt single phase feeder originating from a three phase service. Using the standard calculation, what is the calculated load in amps on the service phase conductors? **A)** 1146 amps, **B)** 661 amps, **C)** 382 amps, **D)** 286 amps.

Last Month's Question: A Class B label can be used for replacing a 240v, 110A furnace. True/False? The answer is: **False)** [WAC 296-46B-900(26)(a)(ii)(D)].

Premier Electric

10139 N Navion
(208) 762-4506 Hayden, Id 83835 (208) 762-4509 Fax

October 19, 2007

Idaho Division of Building Safety
Electrical Bureau
1090 E Watertower St.
Meridian, ID 83642

RE: Letter of Appeal

To Whom It May Concern:

This request for appeals letter is in regards to a violation issued by inspector Terry Blessing on 10/15/07 for a job located at 6271 N 4th St, in Coeur d' Alene, ID. (Violation Code ELE.05 for failure to supervise apprentices)
We strive to meet ratios at all times, but feel that there should be leniency granted for the few times that it can be almost impossible to meet them. In today's competitive construction industry it is necessary to maintain excellent customer service. When situations arise that one man is needed to respond to another job, it is a waste of time and money for all involved to pull every man off a job, or to just send the apprentices home for 1 hr. It is in the best interests of all (customers and contractors) to send the most experienced worker (which is usually a journeyman) to go and resolve the problem quickly and efficiently. This is why we feel that this situation needs to be granted leniency. On this day, the journeyman electrician was called to repair an outlet at a previous job. The journeyman left the above address, went to the service call, stopped to get materials and came back to supervise the apprentices again. It was during this 1.5 hr departure time that Mr. Blessing found the apprentices unsupervised.
We feel that in lieu of the above circumstances it would be advantageous to implement a policy to allow 1-4th year apprentice the ability to work unsupervised a small percentage of the time. It would compliment the learning process well to allow a transition period from a 4th year supervised apprentice to an unsupervised Journeyman. We feel it would be good to come up with some type of system that does not punish apprentices and companies for a low percentage of unsupervised work. Due to customer service needs we cannot send a 3 man crew to do a 45 minute service call.
We completely see both sides of this situation and agree that it is essential to regulate the industry to ensure safety and quality work; it is apparent though that there is an opportunity for some improvements in the current regulations.

Thank you,

Travis Smith
Owner
Premier Electric

JOURNEYMAN & APPRENTICE LICENSE COUNTS
1/16/2008

ELECTRICAL

Journeyman	**-**	**5,726**	**– Active**
Master	**-**	**337**	**- Active**
Apprentice	**-**	**2,472**	**- Active**
Apprentice	**-**	**2**	**- Suspended – (not in school)**

PLUMBING

Journeyman	**-**	**2,198**	**– Active**
Apprentice	**-**	**789**	**- Active**
Apprentice	**-**	**135**	**- Suspended – (not in school)**

HVAC

Journeyman	**-**	**3,861**	**– Active**
Apprentice	**-**	**911**	**- Active**
Apprentice	**-**	**198**	**- Suspended – (not in school)**

IDAHO ADMINISTRATIVE CODE

IDAPA 07: DIVISION OF BUILDING SAFETY
TITLE 01
CHAPTER 05: RULES GOVERNING EXAMINATIONS
DIVISION OF BUILDING SAFETY

IDAPA 07.01.05.011 (2007)

011. EXAMINATIONS.

The Electrical Board shall review and approve all versions of examinations prior to administration. Effective Date: (4-5-00)

01. Frequency of Conducting of Examinations. Examinations for all classifications under the Electrical Laws and Rules will be given a minimum of four (4) times each year in at least three (3) locations: One (1) to be in northern Idaho, one (1) to be in central Idaho, and one (1) to be in southern Idaho. The applicant will be notified in writing of the date, time, and location at which the examination will be given, following approval of the application. Effective Date: (4-5-00)

02. Professional Testing Services. In lieu of the administration by the Idaho Electrical Board of the examination for licenses pursuant to this rule, the Board may contract with a professional testing service, to administer the examination, and require license applicants to pay to the testing service the fee that they have set for the examination and to take such examination at the time set by such service. After taking such examination, the applicant shall provide the board with an official copy of his or her test score, before the license will be granted. If the examination is conducted in this fashion, the Board may charge and retain the application fee provided for by *Section 54-1014 of the Idaho Code* to cover the cost of reviewing the applicant's application. Effective Date: (4-5-00)

03. Required Scores. The following scores are considered minimum for passing and are required to be achieved by the applicant prior to issuance of the appropriate license or certification.

Journeyman Electrician	- 70%
Specialty Journeyman Electrician	- 70%
Electrical Contractor	- ~~70%~~ 75%
Specialty Electrical Contractor	- 70%
Electrical Inspector	- 70%
Master Electrician	- 75% Effective Date: (4-6-05)

Effective Date: (4-6-05)

04. Failed Examinations. Effective Date: (4-6-05)

a. An applicant receiving less than a passing score on a first or second examination may be reexamined at the expiration of thirty (30) days after the date of the failed examination. Effective Date: (4-6-05)

b. Before being reexamined after failing an examination the third time, an applicant must: Effective Date: (4-6-05)

i. Wait until the expiration of one (1) year from the date of the failed third examination; or Effective Date: (4-6-05)

ii. Provide proof, satisfactory to the board, of completion of a minimum of twenty-four (24) hours of board-approved, related electrical training or continuing education since the date of the failed third examination. Effective Date: (4-6-05)

c. Before being reexamined after any further failures, an applicant for reexamination must: Effective Date: (4-6-05)

i. Wait until the expiration of an additional one (1) year from the date of the failed examination; or Effective Date: (4-6-05)

ii. Provide proof, satisfactory to the board, of completion of thirty-two (32) hours of board-approved, related electrical training or continuing education since the date of the failed examination. Effective Date: (4-6-05)

Please include this email in the Electrical Board packet.

Al Caine
Licensing & Compliance Manager
Division of Building Safety
1090 E Watertower St
Meridian, ID 83642
(208) 332-7120

From: John Foster [mailto:John.Foster@nocti.org]
Sent: Friday, December 21, 2007 9:30 AM
To: Al Caine
Cc: Steve Keys; Burton Waite; Jeff Fitzloff; Eidjatcjim@cableone.net; marcswidjatc@aol.com; Mark LaBolle; Tom Brown; Amie Birdsall; Lana Ford
Subject: RE: Apprentice Competency Exams

Al,
Our annual CTE conference was in Las Vegas and I guess their tag line "What Happens in Vegas, Stays in Vegas", includes e-mails as well! At least that's the only explanation I can come up with for my response not getting out! Sorry about the confusion, if you ever need to reach me more urgently please feel free to use my cell 954-494-0868.

We've reviewed the materials you sent and believe you are off to a great start! If I understand things correctly we'll create one test for year one and year two (based on your %) which can be used as a pre test or a post test. Years 3 & 4 will be handled somewhat differently, in that there will be "tracks" within each year for the different programs.

We noted that some of the subject areas have fairly low percentages, which translates to low numbers of questions, which translates to low reliability in those areas. We may want to adjust those percentages as we go through the test development process. We've also done a quick comparison to our question bank and believe we have all of your content covered, however most groups adjust questions and in some cases modify them for regional differences.

Assuming I've captured the overall idea of the testing program, our next step will be to send you proposal to spell out some of the work, following that we would write a "Service Agreement" so that each of us understands the deliverables. Amie Birdsall will be sending you a proposal by mid January, and she has been copied above. If I've missed the overall idea or if you need the paper before mid-January let me know.

Best wishes for a joyous holiday,
John

Measuring What Matters

Dr. John C. Foster
President/CEO
NOCTI and The Whitener Group
800-334-6283 ext 218
www.nocti.org
www.Whitenergroup.com

From: Al Caine [mailto:acaine@dbs.idaho.gov]
Sent: Thursday, December 13, 2007 10:13 AM

To: John Foster
Cc: Steve Keys; acaine@dbs.idaho.gov; Burton Waite; Jeff Fitzloff; Eidjatcjim@cableone.net; marcswidjatc@aol.com; Mark Labolle; Tom Brown
Subject: RE: Apprentice Competency Exams

John:

The Electrical Competency Exam Committee met on Monday December 10, 2007. After review of the 3 curriculums that are being utilized in Idaho at this time, it was agreed that years one and two were similar enough that a common competency exam blueprint for those years could be developed (see attached). Years 3 and 4 are similar in the subject area that are taught, but are not all delivered in the same years. We have created a table that shows those subject content areas and feel that the solution would be to create subject area exams. The particular training program then could give exams for those subject areas at the end of the year that they were delivered.

In years one and two the % refers to the percent of questions related to that subject area to be included on the exam. For years 3 & 4 the % refers to the amount of emphasis that would be assessed in the year that the subject area is delivered and assessed.

Much discussion was had on the amount of questions to be included in the exam to perform a valid assessment. The exams need to be comprehensive because they may also be used as a placement exam for someone moving into Idaho from an area that does not require apprenticeship training. We discussed numbers in the range of 60 to 100 questions. Years three and four would vary depending on the program and curriculum.

Please review this information and let me know if it is sufficient to begin the assessment development process. The next Idaho State Electrical Board meeting is scheduled for February 21, 2008. It is our hopes that we can make more progress before that meeting. We have a goal of trying to pilot exams at the end of this school year in the spring.

Please let me know what else you need or if you have any questions.

Al Caine
Licensing & Compliance Manager
Division of Building Safety
1090 E Watertower St
Meridian, ID 83642
(208) 332-7120

From: John Foster [mailto:John.Foster@nocti.org]
Sent: Thursday, October 11, 2007 1:00 PM
To: Al Caine
Subject: RE: Apprentice Competency Exams

Al,
That sounds good. We can provide some suggestions, as we get closer to your date, as to what types of criteria you should consider when weighting/rating the tasks within the occupation. If you need us to facilitate, we could do that as well. After your update meeting we can talk again.
Best,
John

From: Al Caine [mailto:acaine@dbs.idaho.gov]
Sent: Thursday, October 11, 2007 1:09 PM

To: John Foster
Subject: RE: Apprentice Competency Exams

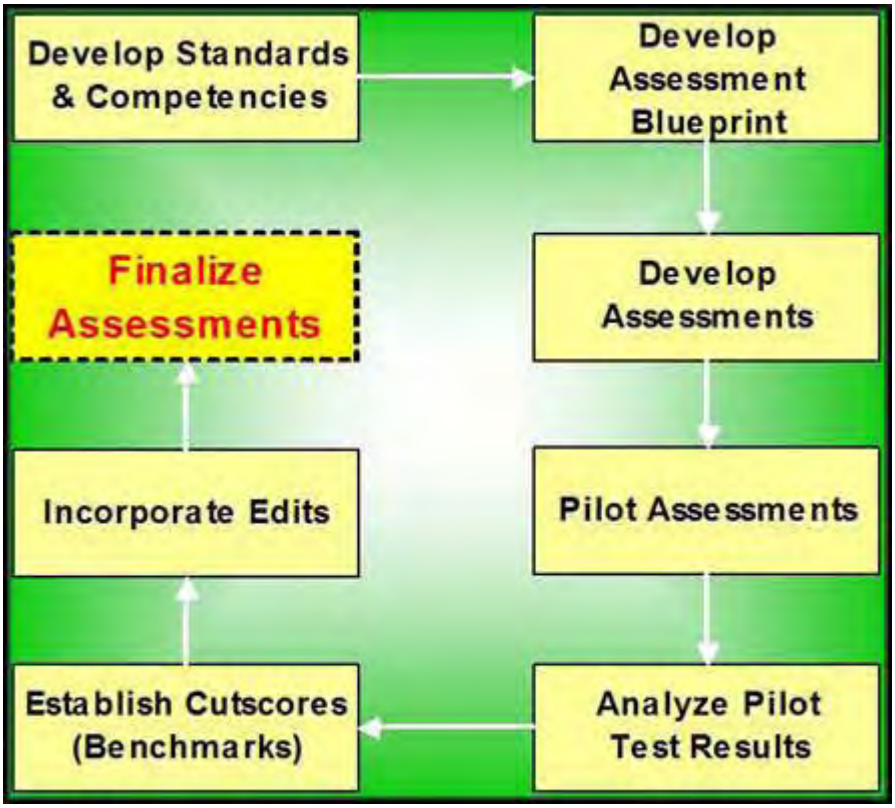
John,

The 10/24 meeting is an evening meeting preceding the Idaho State Electrical Board meeting on the 25th. So, it is more of an "update" meeting. I will share this information with the committee and we'll plan a one or two day event to build the blueprint.

Al Caine
Licensing & Compliance Manager
Division of Building Safety
1090 E Watertower St
Meridian, ID 83642
(208) 332-7120

From: John Foster [mailto:John.Foster@nocti.org]
Sent: Thursday, October 11, 2007 10:38 AM
To: Al Caine
Subject: RE: Apprentice Competency Exams

Al,
That helps a lot!
In order to build an assessment that is sound both legally and psychometrically the test needs to be built from a set of standards and subsequently developed "blueprints". This is the part where the major areas are weighted and rated for importance. Once that phase is complete test questions are developed or modified. I guess what I'm trying to say is that it is important to look at the major areas of the occupation that are covered each year first, and build the test from there. Our experience is that subject matter expert groups tend to get "hung up" when the focus is on the content of individual questions as opposed to areas of content. I'm thinking that your first step should be looking at those 4 guides and finding not only the commonalities, but also which of those common areas fall into which year. We actually just did very similar work with another group, but I would think your group may be able to reach consensus without a facilitator. Doing so would save some developmental costs. Do you have room in your agenda on 10/24 to begin to take a look at what major areas were taught during what years? Below is a visual overview of the process we use.
I hope this helps!
John



From: Al Caine [mailto:acaine@dbs.idaho.gov]
Sent: Thursday, October 11, 2007 11:01 AM
To: John Foster
Subject: RE: Apprentice Competency Exams

John,

Thanks, I've passed this on to the committee.

The Idaho State Electrical Board adopted the Knowledge, Skills & Abilities occupational standards and the curriculum guide from the Electrical Construction Occupations Handbook Volume One that was developed by the U.S. Electrical Construction Industry Skill Standards & Certification Project published November 1995. The Board also approved four commercially available curriculums that meet these standards; the union sponsored program developed by the National Joint Apprenticeship & Training Committee (NJATC); Independent Electrical Contractors (IEC); National Center for Construction Education and Research (NCCER) – with supplementation; and Electrical Training Network developed by the Minnesota Electrical Association.

In discussion, the committee felt that, though there are differences between the curriculums, especially the union and open shop programs, there was enough commonality to develop competency exams that would be relevant across the board for each year of apprenticeship. I would assume that it would be a matter of reviewing questions that you have already developed and select the appropriate subject areas and level of difficulty for each year. We do that now with our journeyman, master and contractor exams in a workshop format with the testing company.

Our next meeting is October 24th. I would expect that I will be able to schedule something more substantive then. I've attached the results of our last meeting for your information.

Al Caine
Licensing & Compliance Manager
Division of Building Safety
1090 E Watertower St
Meridian, ID 83642
(208) 332-7120

From: John Foster [mailto:John.Foster@nocti.org]
Sent: Wednesday, October 10, 2007 12:04 PM
To: Al Caine
Cc: Lana Ford
Subject: RE: Apprentice Competency Exams

Al,
I've embedded the answers to your questions below…

From: Al Caine [mailto:acaine@dbs.idaho.gov]
Sent: Wednesday, October 10, 2007 10:30 AM
To: John Foster
Cc: Lana Ford
Subject: RE: Apprentice Competency Exams

Dr. Foster:

The committee for exploring the possibility of implementing competency exams for each year of electrical apprentices met again and a few questions came up.

Specifically, How are your exams delivered? Can be delivered in paper pencil format or online (we are now at about 65% online customers) Our concern is that apprenticeship is taught through the State of Idaho Professional-Technical education schools, some private schools and the union sponsored training sites located throughout the state. Do you set up a proctor network, In a sense yes. We use a system of test coordinators who are our points of contact. They handle testing dates and security and delivery sorts of issues. deliver the exams to the training organization…what is the procedure you operate under now? We would probably run these tests through our sister company, The Whitener Group, but either way the procedures are the same. You can find those procedures detailed at ...
http://www.whitenergroup.com/PDFs/The%20Whitener%20Group%20Coordinator%20Reference.pdf

Also, what would be the estimated cost per exam? We'd probably have to have a better sense of how the testing was being delivered (types of institutions) NOCTI serves the public sector (schools and Community Colleges and Whitener Group serves the private sector). There is different pricing for each so I'm not sure which category you would fit under? The other assumption is that we would be developing "new" tests for your use as well as delivering them. Assuming you are looking at a customized test being delivered online, delivery scoring and reporting (with no performance component) would probably be

around $20-$30. As far as numbers, there would be approximately 2,000 electrical apprentices tested annually at approximately 15 test sites. If we are able to expand this to the Plumbing and HVAC trades that would be an additional 2,000 exams.
We probably should talk through some options after looking at the detail of your standards.

Best wishes,
John

Al Caine
Licensing & Compliance Manager
Division of Building Safety
1090 E Watertower St
Meridian, ID 83642
(208) 332-7120

From: John Foster [mailto:John.Foster@nocti.org]
Sent: Thursday, September 06, 2007 12:14 PM
To: Al Caine
Subject: Apprentice Competency Exams

Mr. Caine,
We very much appreciate the opportunity to work with Idaho and would certainly be interested in developing or adapting competency exams in the areas mentioned. We are currently working with numerous groups who share similar content to those areas mentioned. In addition to our "standardized" tests in these areas, we work very closely with the UA (plumbers group that Lana Ford mentioned), the Plumbing Heating and Cooling Contractors (PHCC), and the National Home Builders Association (NAHB) designing, delivering and reporting on customized assessments. In addition we have just entered into discussions with the American Refrigeration Institute (ARI) and NATE, and this Monday will be meeting with the director of 12 construction related industry apprenticeship programs. Our facilitators are accustomed to working in these areas and we may be able to save considerable time in the customization process due to the number of related items in our question bank.

We pride ourselves on providing secure testing and assessments that are psychometrically solid. Can we schedule a time to talk about your specific needs?
Best Wishes,
John

Dr. John C. Foster
President/CEO
800-334-6283 ext 18
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www.whitenergroup.com

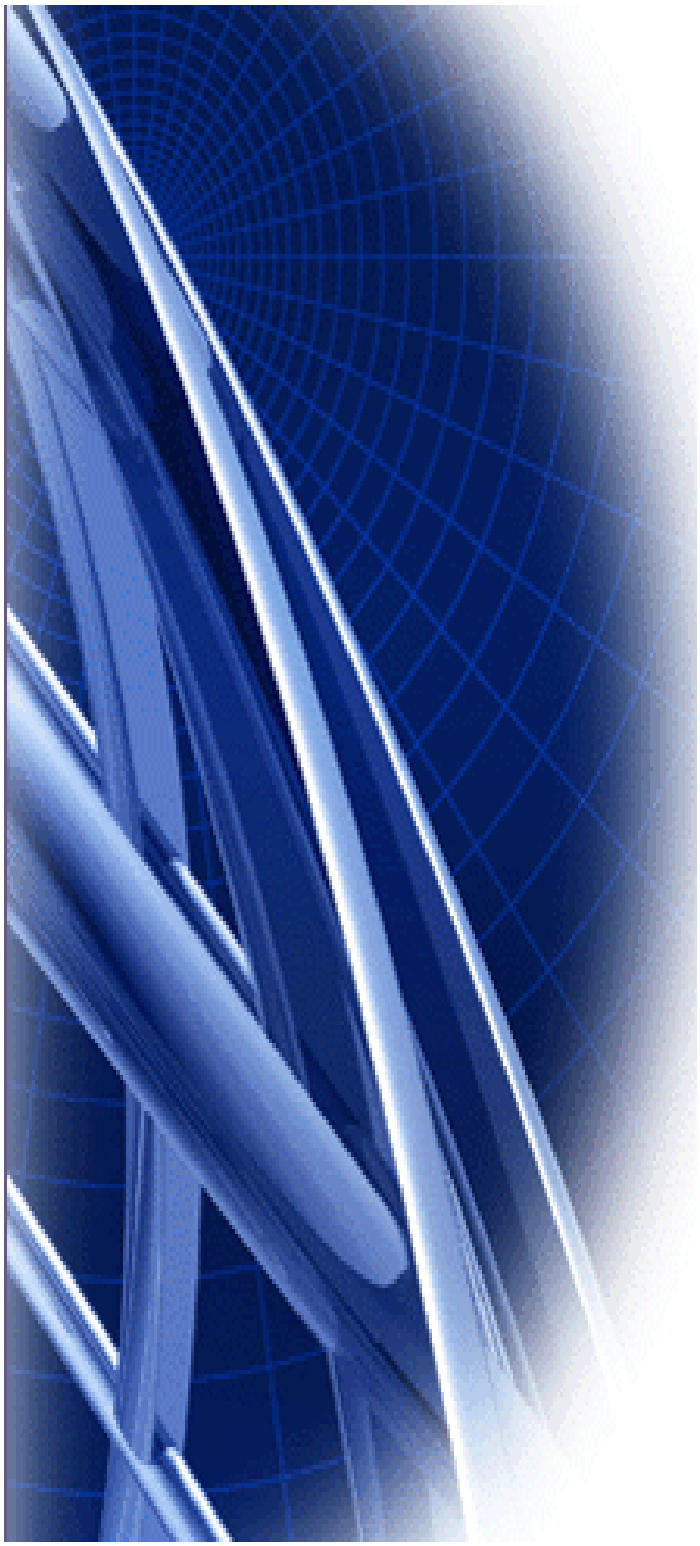
The State of Idaho requires that Electrical, Plumbing and HVAC apprentices complete four years of on-the-job experience in addition to a minimum of 144 hours of related classroom instruction per year in order to qualify for the journeyman exam in their respective trade. Currently, the curriculums for these programs are reviewed by the respective board in collaboration with the Idaho State Division of Professional-Technical Education. The delivery of these approved curriculums are accomplished through the State education system, a few private colleges and the union training programs. The final exams for each year is developed by the instructor for that year.

The Boards and PTE are interested in establishing common competency exams to be utilized for each year of apprenticeship that would be given statewide and that the apprentice must pass in order to advance to the next year. We understand that the State of Utah is currently requiring this of apprentices in their State.

We have established the criteria (based on National Standards) for the curriculum and would work with NOCTI in "validating" the exams as what would be expected for each year.

Would NOCTI be interested in developing competency exams for Idaho in these trades?

THE WHITENER GROUP, INC.
A WHOLLY OWNED SUBSIDIARY OF NOCTI



Proposal for the Development of Apprentice Competency Examinations for the Idaho Division of Building Safety

500 North Bronson ◆ Big Rapids, MI 49307
1-800-334-6283

http://www.whitenergroup.org

Introduction

The Whitener Group is pleased to respond to your request for the development of electrical apprentice competency assessments for the Idaho Division of Building Safety (IDBS). We propose that the IDBS contract with The Whitener Group to conduct assessment development workshops to complete this task. Various related services are recommended and described in detail below to ensure psychometrically-sound assessments.

The following pages provide a brief overview of The Whitener Group's products and services and include the proposed plan for the development of assessments to meet the needs of IDBS's apprentice assessment program.

Our organization has extensive experience in assessment development and in assisting clients to identify and organize the necessary skills to be assessed. We believe that assessment can be a very strong tool in many different employment and educational environments. The implementation of a robust scoring and reporting program has provided us with technological advances that our fast-growing customer base demands. We are a client-driven organization. Meeting the needs of our customers with quality products and services has always been, and will continue to be, the focus of our business.

Business Organization

The Whitener Group, Inc. is a wholly owned subsidiary of NOCTI, a national leader in developing competency assessments that are fair, reliable and affordable. The company has over 40 years of experience in working with management, unions and employees in translating skills based on knowledge into practical work-related gains.

NOCTI was founded in 1966 and incorporated in 1973 as a not-for-profit consortium comprised of representatives from the fifty states and territories. NOCTI is governed by a twelve-member Board of Trustees with expertise in, and a strong commitment to improving America's workforce. In 1999, The Whitener Group was organized as a separate company to address the increasing inquiries from non-education oriented organizations.

The Whitener Group offers a variety of services to industry including job and task analysis, gap analysis, assessment development, cut score establishment, professional development workshops, assessment delivery and scoring and reporting services. The Whitener Group can assist companies and other organizations by providing tools to:

- Select skilled workers and candidates for educational programs
- Promote current employees based on objective, verifiable standards
- Provide blueprints for employee development
- Determine workforce and educational training needs
- Analyze job requirements to develop precise job descriptions, performance analysis charts, objective performance appraisals, valid interview protocol and/or career paths
- Utilize assessment services to identify both individual and program skill gaps and needs analysis
- Utilize assessments as a component of a certification system

The Whitener Group has also developed certification assessments for such professional organizations as:

- Recreation Vehicle Industry Association (RVIA), RV Service Technician
- American Boat and Yacht Council (ABYC), Marine Engine Repair (Gasoline and Diesel), Marine Electrical Repair, Marine HVAC Repair, Composite Boat Builder, Corrosion and Laminator
- BICSI: A Telecommunications Association, Outside Plant and Installer
- Manufacturing Skills Standards Council, Safety; Quality Control and Continuous Improvement; Manufacturing Processes and Production and Maintenance Awareness
- Yacht Brokers Association of America, National Yacht Broker Certification

In addition, The Whitener Group has developed occupational competency exams for over 250 companies and associations. We have listed some below for your review.

A Sampling of The Whitener Group Clients

AK Steel	Duke Realty	Nabisco Bakery
Allied Signal	Dutch Quality House	Nestle
Association for Hose and Accessories Distributors	E.I. DuPont	Pepsi Co.
AT & T	General Mills	Phelps Dodge
BAMA	General Motors	Philip Morris
BF Goodrich	Georgia Pacific Corporation	Pipe Trades Training Center
Bryan Foods	Hershey	Quaker Oats
Chevrolet Motor Division	Independent Sealing Distributors	Robert Bosch Corporation
Choice Hotels	Johnson & Johnson	Snap-On Tools
Chrysler Corporation	Kellogg USA, Inc.	Sony Disc Manufacturing
CIBA Vision	Lance Corporation	The Kroger Company
City of Detroit	Lucent Technologies	Toyota Motor Manufacturing
Dayton Power & Light	Miller Brewing Company	Yacht Brokers

In response to the ever-growing needs of our clients, we developed a robust online assessment delivery, scoring and reporting system. We are committed to ongoing improvement in all of our processes, products and services.

Assessment Battery

The Whitener Group has an extensive battery of assessments. The original mission of our founding organization (NOCTI) was to design, develop and administer assessments to prospective teachers from industry who needed to demonstrate standards of performance at journeyman levels. This demonstration of skills became the cornerstone of an intensive university certification program enabling individuals from industry to teach in our nation's public schools. This certification system exists today in over 30 states across the nation. The success of the assessments for prospective teachers led our organization to develop assessments of the same caliber for use by students. As the interest and need for assessment by our industry customers began to expand, The Whitener Group was created as a solution for addressing this need.

Currently three different types of assessments are offered in our comprehensive battery. These assessments are based on national and industry standards and normally include a written and performance component. The assessments measure not only what is known, but also how that knowledge is applied, essentially the cognitive and psychomotor domains. Incidentally, we are also capable of assessments in the affective domain (soft skills) and we can incorporate these items into a technical assessment. Each of the groupings described below are geared toward a particular target.

Job Ready Assessments

The Job Ready assessments are designed to measure the skills of individuals who have completed a program of study within an occupation. The assessments are typically administered to secondary and post secondary completers to determine their level of competence before they exit an occupational program and before they enter the workforce. Job Ready assessments are also used by industry clients who can determine a direct correlation between the content of the assessment and the needs of their program. These assessments are often used as a tool in the hiring process or to determine training needs of new employees.

Experienced Worker Assessments

The Experienced Worker assessments are designed to measure an individual's knowledge of higher-level concepts, theories and applications in the related occupation. These assessments are intended for evaluating individuals with a combination of education, training and work experience. The Experienced Worker assessments can be used for both education and business and industry applications.

Industrial Assessments

The Industrial assessment battery is similar to the Experienced Worker battery of assessments in that they are designed to measure higher-level concepts. These assessments are targeted to measure the skills commonly found in the manufacturing industry. These multiple-choice assessments can be used as a tool in the hiring process or to determine training needs of new employees.

Customized Assessments

When a standardized assessment does not meet the needs of a customer, which is often the case for our industry customers, The Whitener Group works with the organization to customize assessments that directly align with their needs.

The customized assessment services that The Whitener Group provides include (1) conducting job and task analyses; (2) conducting assessment development workshops; and (3) assisting customers in establishing valid and defensible cut-scores.

Detailed Response

The Whitener Group proposes the following plan for consideration in developing an apprentice assessment program for the IDBS.[1]

The first task associated with assessment development is determining the assessment content. If standards do not exist, a job and task analysis is performed to gather this information. We understand that the Idaho State Electrical Board has adopted the Knowledge, Skills and Abilities occupational standards and the curriculum guide from the Electrical Construction Occupations Handbook, Volume One for its apprenticeship program. The Whitener Group will need to review the standards to determine if there is enough detailed information to provide a basis for the creation of an assessment blueprint outline. If more detail is needed, a Modified Job and Task Analysis will be required (see Step 1A). If there is sufficient detail, then a Modified Job and Task Analysis will not be required and the group can move directly into finalizing the assessment blueprint (see Step 1B).

Step 1A: Conduct a Modified Job and Task Analysis (JTA)

If after reviewing the standards it is determined that a more detailed level of information if required to construct the assessment, the Whitener Group will facilitate a Modified Job and Task Analysis (JTA) process. The IDBS will convene a panel of 5 to 7 Subject Matter Experts (SMEs), based on guidelines provided by The Whitener Group, to further define the critical competencies for the electrical apprenticeship program. The Modified JTA process should include individuals who are representative of the IDBS membership including participants from both unions and open shops. In addition, the SMEs should be geographically diverse in order to ensure that the assessments produced are representative of the entire state. The IDBS will retain ownership of the information that is part of the final JTA report.

The JTA will result in an assessment blueprint. During the assembly of the assessment blueprint, the SME panel will be asked to assign importance ratings to each of the identified competencies. It is from this process that the quantity of items needed to sufficiently measure each of the competencies will be determined. The Whitener Group will work with the IDBS prior to beginning this task to establish a targeted number of items which will ensure psychometrically sound assessments.

Specifics

Standard Pricing: $8,000.00 (Covers the content for Years 1 through 4)
The Whitener Group Responsibilities: Facilitate onsite or web conference workshop; prepare JTA report upon completion.
IDBS Responsibilities: Recruit a representative sample of SMEs (5 to 7) and at least one IDBS representative to take part in the onsite or web conference workshop; arrange logistics for workshop.
Timeframe: 1 day

Step 1B: Create Assessment Blueprints

If the standards provide a sufficient level of detail to construct an assessment, The Whitener Group will develop a template to begin the assessment blueprint process. The Whitener Group facilitator will guide the SME panel in evaluating each of the competencies for importance within the electrical occupation. It is from this process that the quantity of items needed to sufficiently measure each of the competencies will be determined. The Whitener Group will work with the IDBS prior to beginning this task to establish a targeted number of items which will ensure psychometrically sound assessments. The outcome of this task will be an assessment blueprint for Years 1 through 4 (with specific tracks identified for Years 3 and 4).

[1]The Whitener Group follows the *Standards for Educational and Psychological Testing* published by the American Educational Research Association, the American Psychological Association and the National Council of Measurement in Education (1999).

Assessment blueprints and related assessments for Years 3 and 4 will be constructed to match the content delivery sequence as it relates to a particular training program (JATC, NCCER, IEC).

Specifics

Standard Pricing: $6,000 ($1,500 for each assessment, Years 1 through 4 ([with specific tracks identified for Years 3 and 4])

The Whitener Group Responsibilities: Facilitate onsite or web conference workshop; prepare assessment blueprints for Years 1 through 4 (with specific tracks identified for Years 3 and 4).

IDBS Responsibilities: Recruit a representative sample of SMEs (5 to 7) and at least one IDBS representative to take part in the onsite or web conference workshop; arrange logistics for workshop.

Timeframe: ½ to 1 day

Step 2: Develop Multiple-Choice Assessment

Using the assessment blueprints as a foundation, the SMEs will work with a Whitener Group facilitator to create the multiple-choice assessment.

The panel will be provided with a targeted pool of items for possible selection. The Whitener Group facilitator will work with the SME team to ensure that items selected from this pool can be directly linked to a competency as identified on the assessment blueprint. When additional items are needed to measure the competencies, The Whitener Group will assist the SMEs in constructing appropriate items that adhere to quality testing guidelines.

The Whitener Group also recommends that the panel generate an assessment item pool which consists of a larger set of items than what is required by the test specifications. These extra items will be piloted and can be used as replacement items for the final assembly of the assessment. Items may be enhanced by the incorporation of graphics, diagrams, charts or scenarios. If new items are developed that reference a graphic, diagram or chart, it is the responsibility of the IDBS to provide camera-ready electronic files.

Assessment development workshops can be conducted via web conference or in an onsite format. Our standard policy for ownership of items is a joint-ownership concept. We look at ownership at both a test-level and item-level.

Test Level: When a test is assembled for a customer, we will never sell that test in the same format to another organization unless the customer would like that to be an available option.

Item Level: Any items used in a newly developed assessment which have been selected from The Whitener Group's item bank remain the property of The Whitener Group. Items used from the customer's existing item bank or other customer-owned resources have the option of being "restricted" from use in any other assessments. If the items are jointly developed, meaning resources from both organizations were used, the groups share ownership of the items, whereby either organization can use the items in other assessments. Finally, if the items were developed using Whitener Group SMEs with Whitener Group facilitation, those items will be owned solely by The Whitener Group but will not be used in other assessments for a period of one year. We normally keep any newly developed items "protected" for a period of one year, meaning that the items will not be used for other assessments during this one-year period. After this time, the items are released to the item bank for use.

The Whitener Group is fortunate to have strong relationships with its industry customers. Our relationships have expanded the breadth, depth and quality of our item bank because our industry partners allow their items to be used for in the development of future assessments. Our industry

customers approach this as “giving back to education”. We encourage all of our customers to consider this philosophy. Our industry customers believe this is their philanthropic duty to educational institutions. We encourage all of our customers to fulfill their philanthropic charge in this manner.

Specifics

Standard Pricing: $17,000.00 ($4,250 for each assessment, Years 1 through 4 [with specific tracks identified for Years 3 and 4]).
The Whitener Group Responsibilities: Create a targeted item pool; facilitate workshop; assemble final assessment documents.
IDBS Responsibilities: Recruit 5 to 7 SMEs and at least one IDBS representative to take part in the web conference or onsite workshop; arrange logistics for web conference or onsite workshop; provide camera-ready electronic images, if required. **Timeframe:** Approximately 1 day per assessment (depending on length of assessment.)

**It is important to note that the Whitener Group requires three weeks to assemble the test draft after the assessment development workshop. Once the draft is assembled, it is returned to the customer for review and approval.*

Step 3: Pilot Assessments

Part of the validation process is to pilot the assessments prior to utilizing them for regular administration purposes. It is important to pilot the assessments with a population that is representative of the intended test takers. Demographic characteristics such as gender, ethnicity, and geographical representation should be considered and included in the pilot. The required number of pilot test takers is determined as one more test taker than number of items on the assessment. (e.g., the pilot sample for a 100-item test should have a minimum of 101 participants).

The purpose of the pilot is to assist in determining psychometric properties of the items and the overall test via a comprehensive item analysis as described below. In addition, this pilot data is used in the cut score process in conjunction with SME input to determine the most appropriate level at which to set the benchmark for each assessment.

Specifics

Standard Pricing: $5.00 per test taker per assessment (delivered through the online system.)
Estimated cost: $2,000.00
The Whitener Group Responsibilities: Provide online assessments for piloting; score assessments after piloting is complete in preparation for item analysis and cut score workshops.
IDBS Responsibilities: Recruit pilot sites/test takers; recruit proctors; establish test administration window.
Timeframe: 2 to 4 weeks (depends on IDBS timeframe)

Step 4: Conduct Item Analyses

Upon completion of the pilot administration, The Whitener Group will conduct a detailed item and test analysis for the assessments. An item analysis report will be provided for the assessments based on the pilot test data.

The purpose of the item analysis is to provide psychometric information at two levels. First, the analysis provides item-level information, including the difficulty level of each item, how well each item discriminates between high and low scorers, whether particular distracters may be too attractive to test takers, and how well a performance on a particular item predicts performance on the test as a whole. Second, the item analysis provides test-level information, including the mean, maximum and minimum scores, several measures of variance (e.g., standard deviation, standard error of measurement, skew, kurtosis), and the reliability of the assessment.

The data from the item analysis will provide the information necessary to determine the psychometric strength of the assessments and to make adjustments accordingly if required (e.g., deleting items that perform poorly).

Specifics

Standard Pricing: $3,000.00 ($750.00 for each assessment, Years 1 through 4 [with specific tracks identified for Years 3 and 4]).
The Whitener Group Responsibilities: Analyze pilot item and test information; provide item analysis with recommendations for each assessment.
IDBS Responsibilities: None.
Timeframe: 4 weeks

Step 5: Establish Cut Scores

An important component of the assessment development process after the pilot testing is complete is to establish a legally defensible cut score. The Whitener Group will facilitate a cut score workshop for each assessment with a panel of SMEs (5 to 7) selected by the IDBS. It is acceptable for there to be some overlap for these panels from previous panels (e.g., Modified JTA process, blueprint and assessment development). When recruiting participants for the cut score panels, it is recommended that the IDBS ensure representation from all stakeholders in the IDBS network.

The facilitator will utilize a psychometrically sound standard-setting process to determine the passing score with each panel. Pilot test data and demographic information will be used as part of the cut score determination. During this process, the panels will also identify any additional modifications to be made to the assessment items prior to launching the new assessments. The Whitener Group will incorporate any identified edits determined during the cut score workshop process and prepare the assessments for regular administration.

The cut score workshops will be conducted via conference call.

Specifics

Standard Pricing: $12,000.00 ($3,000.00 for each assessment, Years 1 through 4 [with specific tracks identified for Years 3 and 4]).
The Whitener Group Responsibilities: Facilitate workshop for the assessment; provide cut score report for the assessment; incorporate edits for test finalization.
IDBS Responsibilities: Recruit 5 to 7 SMEs including at least one IDBS representative to take part in the web conference workshop; schedule participant attendance for workshop.
Timeframe: 2-3 hours

Cost Information

The costs outlined in Tables 1 and 2 below reflect The Whitener Group's standard pricing for assessment development. The costs in Table 1 reflect the need for a Modified Job and Task Analysis. The costs in Table 2 exclude the Modified Job and Task Analysis but include the costs for the Assessment Blueprint development. All costs are based on the steps outlined in the previous pages of this proposal and are based on a per-test basis.

Table 1
The Whitener Group Standard Pricing Schedule

Modified Job and Task Analysis and Assessment Development	Price
Step 1: Conduct Modified Job and Task Analysis Process and Assemble Assessment Blueprint for Electrical Assessments	$8,000.00
Step 2: Develop Multiple-Choice Assessments for Year 1, Year 2 and Years 3 and 4 (with specific tracks identified)	$17,000.00
Step 3: Pilot Assessment Through Online System (This cost is an estimate based on 101 test takers per assessment at $5.00/test.)	$2,005.00
Step 4: Conduct Item Analyses/Bias Review for Assessments (Year 1, Year 2, and Years 3 and4 [with specific tracks identified])	$3,000.00
Step 5: Establish Cut Score for Multiple-Choice Assessments (Year 1, Year 2 and Years 3 and 4 [with specific tracks identified])	$12,000.00
Sub-Total	$42,005.00
Project Oversight	$2,250.00
TOTAL (excluding travel expenses)	**$44,255.00***

Table 2
The Whitener Group Standard Pricing Schedule
Assessment Blueprint and Assessment Development

Assessment Blueprint and Assessment Development	Price
Step 1: Create Assessment Blueprints for Electrical Assessments (Year 1, Year 2, Years 3 and 4 [with specific tracks identified])	$6,000.00
Step 2: Develop Multiple-Choice Assessments for Year 1, Year 2 and Years 3 and 4 (with specific tracks identified)	$17,000.00
Step 3: Pilot Assessment Through Online System (This cost is an estimate based on 101 test takers per assessment at $5.00/test.)	$2,005.00
Step 4: Conduct Item Analyses/Bias Review for Assessments (Year 1, Year 2, and Years 3 and 4 [with specific tracks identified])	$3,000.00
Step 5: Establish Cut Score for Multiple-Choice Assessments (Year 1, Year 2 and Years 3 and 4 [with specific tracks identified])	$12,000.00
Sub-Total	$40,005.00
Project Oversight	$2,250.00
TOTAL (excluding travel expenses)	**$42,255.00**

*Travel expenses are **not** included in these totals but are estimated to be $1,200.00 for each trip. Travel expenses may include airline expenses (coach), hotel accommodations, meal reimbursement, personal vehicle mileage reimbursement to and from the airport, transportation to and from hotel/airport, airport parking and tolls.

Below, we have also provided the costs for distributing and scoring the assessments through The Whitener Group. Assessments can be delivered through the online delivery system whereby test takers receive immediate results. Assessments can also be delivered in the traditional paper/pencil format. For a minimal fee, the online system can be branded to reflect the look and feel of the IDBS.

Standard score reports will be available through the online reporting system shortly after test administration. IDBS can be set up to manage the assessment sites. This allows access to results for all test sites administering the assessment and could be helpful considering that IDBS plans to have 15 sites administering the assessments. Score reports can be customized based on IDBS's needs and specialized summary reports are available which may include detailed test and test taker information as well as a variety of other breakdowns (e.g. demographics).

Cost per administration (assessment, scoring and reporting):
$25.00/assessment plus shipping charges (if applicable for paper/pencil based delivery)

State Electrical Board Meeting 2-21-08

Swimming pool agenda items

I - Propose a licensing, registration, certification process, sponsorship or other means of approval, to allow swimming pool contractors to perform limited electrical activities related to their trade.

These activities include and are limited to:

1) Bonding connections to the structural elements of the pool, spa, waterfeature, etc.
2) Install pool, spa, fountain and waterfeature related underground conduits from the vessel, i.e. underwater lights, speakers, fiberoptics, electrically operated covers, convenience outlets, remote controls, conduits to switch & power locations when ran underground.
3) Bonding the embedded elements and accessories of the pool and decking, (i.e. handrail anchors, racing lane rope anchors, slides, spray heads, pool cover machines and related lids, fences, etc.),
4) Install the permanent ground connection to the wet niche, pull underwater light fixture with ground and encapsulate the permanent ground to the wet niche light housing with the approved potting compound.
5) Swimming pool contractor is defined as a company, individual or employee or assignee of a swimming pool contractor, actively engaged in the construction of swimming pools, spas or architectural water related features.

II - Why?

1) Scheduling and client frustrations, schedule could be more easily anticipated if the pool contractor were in control of their own resources.
2) The pool industry tends to be more familiar with the devices and methods than many electrical contractors.
3) Any electrical related delays in schedule are reflected onto the pool contractor, by client.
4) Many electricians don't like pulling away from a "big" job to perform these smaller tasks.
5) Leaking wet niche conduits are reflected onto pool contractor, by client.
6) Trenching is not time well spent for the journeymen.
7) Pool contractor is usually on the project more frequently and would likely have more of an interest to protect bond wire pigtails from damage or theft.
8) A few less 'hoops' to jump through to verify the status of inspections.
9) Electrical contractors opting out of the entire project at the last minute, thus creating a difficult situation for the client's schedule.

III - Sponsorship

1) Training for the pool contractor would be accomplished by the pool contractor employing the services of a licensed electrical contractor familiar with these swimming pool tasks.
2) The AHJ would ultimately determine the proficiency of the pool contractor each time a project was inspected.

3) Swimming pool contractor must have a current Contractor Registration or license with the State of Idaho.
4) Pool contractor must submit valid proof of liability & worker's compensation insurance.
5) Pre-registration with the Electrical Bureau would be required by each pool contractor.

IV- Permits & fees

1) The permit costs would be based on some administrative fee and the cost of four trips and inspections.
2) Additional inspections for any reason, due to a job requiring additional trips, project not ready, failed inspection, etc, beyond four trips are billed at some rate based on the cost of an inspection.

V - Pool & Spa Technician certification

1) Propose a training process and certification program, to allow swimming pool service technicians to remove, repair and replace existing pump motors, heaters, cover motors, lights and other hardwired pool related devices associated with pools, spas etc.
2) This certification limits the holder to repair or replace devices on existing pool, spa and water feature installations. These devices will typically include motors, controls, fixtures, heaters etc. and shall be electrically beyond the service disconnect.
3) Training should include wiring methods, wire sizing and types, bonding and grounding and current code requirements related to task. Training should also include evaluation of older systems, for determining when an electrician should be contacted. This training should also include education and training for suction entrapment mitigation, for which there will soon be federal grants available. The NEC has already addressed some of these issues by implementing code requiring emergency shut-offs.
4) A fee should be imposed to each applicant to fund the training. A proficiency test should be established.
5) A program is currently in place, sponsored by the APSP (Association of Pool and Spa Professionals).

Pool construction process

Listed below are the steps necessary to construct a typical swimming pool. The steps in italics are the tasks currently done by the electrical contractor, but the pool industry would like to perform. On the following pages are more specific lists of the tasks and necessary tools.

1) Dig the pool and stub out plumbing.
2) Schedule time to meet and brief electrical contractor, on site usually, to discuss schedule, and details of what needs to be done, and how and when to do it.
3) Install rebar, deliver bonding supplies.
4) ***Schedule electrician to connect bonding clamps and wire to rebar grid at the necessary points.***
5) ***Calls for inspection.***
6) Confirm electrical bonding inspection by, leaving messages with the electrician and/or the AHJ, or visit the jobsite.
7) Once bonding is confirmed to have passed, order a structural inspection.
8) Confirm structural inspection by, leaving messages with the building inspector, going to the website or visit the jobsite.
9) Order concrete for Gunite and schedule manpower and equipment.
10) Gunite
11) Again, schedule time to meet and brief electrical contractor, on site usually.
12) Dig trenches for pool piping and install pool piping.
13) Backfill pool plumbing trenches unless electrician wants to use them.
14) ***Schedule electrician to dig trenches for conduits, (journeyman electricians despise digging trenches and who doesn't) and install conduits.***
15) ***Install light and potting compound (unless cord length is such that it is a non-stock or subject to theft)***
16) ***Call for inspection***.
17) Confirm inspections by, leaving messages with the electrician and/or the AHJ, or visit jobsite.
18) Customer calls wondering why their yard still looks like a bomb went off (open trenches) after many days of no activity.
19) Schedule backfill equipment
20) Pull up and protect bond wire pigtails to prevent being buried and hide spool of wire to prevent wire from being clipped off at the very edge of the vessel and stolen.
21) Back fill trenches
22) Prepare base for flat work
23) Install waterline tile
24) Drop off the items to be embedded into pour for electrician.
25) ***Schedule electrician to attach bond wires from the vessel to the items which are to be embedded in concrete deck.***
26) ***Call for inspection***
27) Confirm inspections
28) Schedule concrete, crews and equipment for deck,
29) Pour concrete deck
30) Install pool equipment

31) ***Schedule electrician to attach bond wires to items to be embedded into pool vessel, install pool light if not previously installed.***
32) ***Call for inspection***
33) Electrician wires all pool equipment, controls, etc.
34) Plaster
35) Fill pool
36) Install electric pool cover machine, temporarily connect with an extension cord to facilitate the installation and test the cover.
37) Install slides diving boards etc.
38) Electrician wires electric pool cover.
39) ***Bond all pool equipment for final inspection, including pool cover machine.***
40) Call for final inspections, (electrical must go first, the HVAC, then building department will sign off)
41) Confirm final electrical inspections, then schedule final building department inspections.

Materials, tools & process for <u>BONDING SHELL</u>

1) Wire cutters,
2) Submittal info for each piece of equipment to be bonded to determine length of pigtails,
3) Plan to show locations of the devices to be bonded.
4) Torque wrench
5) #8 bare solid copper wire
6) Correct size and appropriate type of clamps, which we supply because there is or was no real call at the supply houses to stock these.
7) Wet niche
8) From the plan and a review of the actual site, determine locations of items that require bonding.
9) From the manufacturer's submittal data sheets, if available, or asking the pool builder, determine the length of the bond wire necessary to connect the item for proper location.
10) Install the bonding clamp over the rebar (the rebar should be at least 20 ft long or the longest bar in the rebar grid) and attach the correct length of bond wire to the resultant clamp and rebar.
11) Tighten the clamp as per clamp manufacturer's requirements.
12) Very important do not run the wire up over the form, it must exit below the forms.
13) Connect a bond wire to the bonding lug on the wet and tighten using a screwdriver, connect the other end of this bond wire to the rebar.
14) Protect bond wire pigtails from damage during the balance of the construction.
15) Install the supplied section of conduit to the wet niche using PVC glue and primer, this must be a water tight connection. Do not allow the glue to run back into the wet niche as damage to the threaded bulk head will occur and will not be discovered until the light fixture is installed.
16) Call for inspections.
17) Notify pool contractor of the status of the inspections.

Materials, tools & process for installing <u>CONDUITS</u>

1) Plan
2) Shovel or tractor
3) Schedule 40 PVC pipe and elbows
4) Schedule 80 PVC pipe
5) Tube cutter
6) PVC cement and primer
7) PVC hot box, most already have for bending PVC pipe when plumbing spas.
8) From the plan and the actual site, determine conduit routes for the controls, power, equipment area, outlets and junction boxes.
9) Dig trenches for the conduits, use pool plumbing trenches where possible.
10) Install conduits and stub to each location, determined above.
11) Place bond wire for pool equipment into trench.

12) Very important; the conduit for the wet niche must be water tight or the pool will leak.
13) Call for inspections.
14) Once inspected, backfill and properly compact trenches.
15) Notify pool contractor of the status of the inspections.

Materials, tools & process for <u>BONDING DECK EMBEDS</u>

1) Wire cutters
2) Approved connectors for embedded devices
3) Screw driver and or a set of wrenches
4) Locate bond wire pigtails from bonding the shell
5) From the plan and a review of the actual site, determine exact locations of items that require bonding.
6) From the manufacturer's submittal data sheets, if available, or asking the pool builder, determine the appropriate method of attaching bond wire to the embediment.
7) Acquire the appropriate connecting devices and connect to the embediments, as well as to fences, window frames, deck re-enforcing, etc.
8) Very important; each embed must be placed as close to it's final position as possible.
9) Tighten the clamp as per clamp manufacturer's requirements.
10) Very important; do not allow long runs (5 ft or more) of #8 bond wire through the deck, it should be covered over with sand, gravel or dirt to create a cold joint.
11) Call for inspections.
12) Notify pool contractor of the status of the inspections.

Materials, tools & process for <u>UNDERWATER LIGHTS</u>

1) Wire cutters & strippers
2) Light fixture with sufficient SO cord length
3) Potting compound, 3M available from pool supply house or special order from electrical supply
4) #8 THHN green copper wire
5) Fish tape
6) Approved Junction box
7) At the junction box location, change the riser of conduit to Sch 80.
8) Using the fish tape, pull the pool fixture SO cord and the #8 green ground wire from the niche to the Junction box.
9) Leave enough SO cord to remove the fixture from the pool for re-lamping.
10) Cut and strip the #8 green, connect to the permanent grounding lug in the wet niche and fully encapsulate using the approved potting compound.
11) Very important, do not use potting compound, epoxy or silicon to seal the light conduit, if the wet niche is equipped with a strain-relief or water seal, install.
12) Call for inspections.
13) Notify pool contractor of the status of the inspections.

Report from Professional Technical Education

I held a meeting with the technical colleges on January 24. All schools were represented and reported that the fall semester of the apprenticeship classes went reasonably well. There was considerable discussion about how to try to increase a lab experience in the training provided by the schools since an apprentice may not get exposed to all of the different skills at his employers business. The need for these labs is certainly there, but how to make those available will vary from school to school

The electrical apprentice placement procedures process has been reviewed by Al Caine and also representatives from the six technical colleges. I will be putting that item on the next board meeting for your review and approval.

Respectfully submitted

Burton Waite
Short-Term Training Program manager
Idaho Division of Professional-Technical Education

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Website: www.nwsigncouncil.org

May 7, 2007

Mr. Al Caine
Licensing Program Manager
Division of Building Safety
1090 E. Watertower Street
Meridian, ID 83642

Re: May 10 Agenda

Dear Mr. Caine:

In follow up to my voicemail messages and your telephone conversation with David Servine, please add an item to the May 10 meeting agenda to address the issue of specialty sign electricians and specialty sign contractors servicing HID luminaries, including changing ballasts. We respectfully request that the agenda allow a presentation by Mr. David Servine and comments from a representation of Idaho sign contractors.

Currently, the administrative rules governing electrical specialty licensing prohibit a specialty electrical contractor from performing this work. Sign contractors have the necessary expertise and equipment to do this work, and they are frequently contracted to service luminaries. This restriction presents a problem for the property owners/managers who wish to contract with one company to maintain their on-premise signs and parking lot lights.

I will contact you on Tuesday morning to confirm that this item has been placed on the agenda and answer any questions you may have.

Respectfully yours,

Patti King
Executive Director

/pk

Idaho Administrative Code IDAPA 07.01.04 (02 Sign Electrical)
Draft Revisions

Any person qualifying for or having in his/her possession a current sign electrical license may install, maintain, repair and replace equipment, controls and wiring on the ~~secondary~~ load side of a sign, outline lighting, skeleton tubing, or pole mounted luminaire disconnecting means providing the disconnecting means is located on the sign, skeleton tubing, luminaire or within ~~a distance of two feet and in~~ sight there from. This person may not install, maintain or repair branch circuit conductors. He/she shall be employed by a licensed sign electrical contractor, whose installations shall be limited to this category. The holder of such specialty license may not countersign a contractor's license application as supervising journeyman except for work within his/her specialty.

Rationale for recommended revisions:

1. When referencing electric signs, "secondary side of a sign disconnect" is a confusing description when applied to sign circuits. In configuring sign circuits, "primary" is applied to wiring on the supply side of a ballast, transformer or electronic power supply. Wiring from the ballast, transformer or electronic power supply to the light source is labeled "secondary wiring." All circuitry, low voltage, line voltage and high voltage downstream from the disconnecting means is more clearly identified as being on the "load side" of the disconnecting means.

2. The NEC makes a distinction between electric signs, outline lighting and skeleton tubing. The language of the existing Administrative Code for the sign specialty does not recognize "skeleton tubing" or outline lighting installation, maintenance, repair as a sign industry activity within a sign electrician's scope of work description.

3. Just as field wired "skeleton neon tubing" and "outline lighting" are often overlooked in statutes describing the scope of work of electric sign personnel, the same is applicable to servicing luminaires. This activity has historically been a part of work performed by North American sign companies for multiple reasons. Foremost, service and maintenance are a substantial part of sign industry activity with allocation of readily available special equipment and personnel for working safely at a variety of heights. Sign electricians – installers and service persons are accustomed to working at extreme heights on signs that have line voltage and high voltage secondary circuitry in excess of 7500 volts. Following often complex wiring diagrams for replacement of power supplies is commonplace for sign electricians, both in the sign factory and in the field.

Sign companies manufacture custom structures and supply luminaries to national businesses.

Many listed signs are constructed with HID ballasts and lamps as an internal lighting source. HID luminaires have virtually replaced the use of fluorescent lamps for illuminating outdoor advertising structures and other non-electrical signs.

It is also a matter of convenience and economy for the business community to use sign companies to service luminaires, since they have the service equipment and licensed service personnel available, many times already on the site doing .

The “two foot rule” is virtually impossible to comply for current sign production and installation techniques. As an example, “Section Signs” (Article 600.2) are installed with power supply enclosures remote from the sign itself, out of sight from the sign itself, on the back side of a wall or parapet. A disconnecting means may be located on one or more power supply enclosures or upstream from a series of power supply enclosures which logically are going to be more than two feet from the sign itself. Large freestanding signs may have controls Since the power supply enclosure is not visible from the sign and visa versa, the NEC requires the disconnecting means or over-current protection device to be capable of being locked in an open position. This would also precludes the use of an overcurrent production device, (breaker) as permitted by the NEC to be the disconnecting means as it, too would be more than two feet from the sign installation.

The NEC requires all signs, outline lighting and skeleton tube installations to have a disconnecting means “within sight of” the installation. The NEC, Article 100 defines “in sight of” as within 50 feet. When the disconnect is out of sight, it must be capable of being locked in the open position.